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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,794	02/27/2002	Craig A. Young	053168-5025	5458

7590

03/16/2004

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EXAMINER

NGUYEN, DONGHAI D

ART UNIT

PAPER NUMBER

3729

5

DATE MAILED: 03/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/083,794

Applicant(s)

YOUNG ET AL. *on*

Examiner

Donghai D. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) 5-7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-7 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-4, drawn to a method of removing and optical device, classified in class 29, subclass 840.
  - II. Claims 5-7, drawn to an optical device remove tool, classified in class 29, subclass 764.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions Group I and Group II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another and materially different process such as stripping a wire.
3. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II and vice versa, restriction for examination purposes as indicated is proper.
4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

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5. During a telephone conversation with Charles E. Wands on March 3, 2004 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-4. Affirmation of this election must be made by applicant in replying to this Office action. Claims 5-7 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

#### ***Drawings***

7. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the step of "peeling a portion of the adhesive pad away from the circuit board" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

cl. 1

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

#### ***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

9. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "the fork portions straddle one or more leads on the optical device during the inserting step" (claim 1, lines 7-8) is vague and indefinite since it is unclear where are the leads located with respect to the optical device so the fork portions can actually straddle one or more leads. Furthermore, it is uncertain the relationships and/or locations/positions among circuit board, adhesive pad, leads/electric lead interconnects, and optical device so the fork portions can actually straddle one or more leads.

"the fork portion" (claim 1, line 7) lacks antecedent basis.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-4, as best as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 4,034,202 to Vandermark.

Regarding claims 1 and 4, Vandermark discloses a method of removing a device contained within a device package (80) from a circuit board (82), wherein the device package is secured to the circuit board using an adhesive pad (98), the method comprising: peeling a portion

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of the adhesive pad away from the circuit board; inserting an optical removal tool (20) between the optical device and the circuit board, wherein the optical removal tool has a pair of fork portions (34/36) and a cavity (col. 6, line 45) positioned between the fork portion, and the fork portions straddle one or more leads (84/90) on the optical device during the inserting step; and prying the remainder of the adhesive pad away from the circuit board/device package using the device removal tool (Col. 7, lines 36-38).

Regarding claims 2 and 3, Vandermark discloses the device further includes electric lead interconnects soldered to electric connections on the circuit board, the method further comprising breaking the soldered connections the breaking the soldered connections is performed by heating the soldered connections to a temperature above a temperature at which the solder of the soldered connections melt, but below a temperature that is likely to do any thermal damage to the device (col. 6, lines 1-6 or Col. 7, lines 17-23).

12. Claims 1-4, as best as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 6,108,901 to Kossor.

Regarding claims 1 and 4, Kossor discloses a method of removing a device contained within a device package (28) from a circuit board (34), wherein the device package is secured to the circuit board using an adhesive pad (Abstract lines 7-10), the method comprising: peeling a portion of the adhesive pad away from the circuit board (Col. 2, lines 2, 60-62); inserting an optical removal tool (18/50/100) between the optical device and the circuit board, wherein the optical removal tool has a pair of fork portions (14/16 or 80/82 or 110/112) and a cavity (Figs. 1, 4, and 8) positioned between the fork portion, and the fork portions straddle one or more leads

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(32/33, pin connectors) on the optical device during the inserting step; and prying the remainder of the adhesive pad away from the circuit board/device using the device removal tool (Figs. 3, 5).

Regarding claims 2-3, col. 3, lines 23-33 discloses de-soldering process.

### *Conclusion*

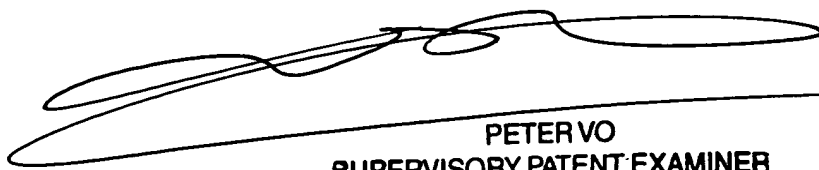
13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donghai D. Nguyen whose telephone number is (703) 305-7859. The examiner can normally be reached on Monday-Friday (9:00-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter D. Vo can be reached on (703) 308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DN



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